

WHAT IS CLAIMED IS:

1. A molding die apparatus for obtaining a molded product by injecting molten resin into a cavity formed when closing a set of dies, the molding die apparatus comprising:

6 a vacuum apparatus including a vacuum tank disposed in proximity to said cavity, wherein air and/or fluid inside said cavity is exhausted by said vacuum apparatus.

12 2. The molding die apparatus according to claim 1, wherein said vacuum apparatus is installed in said die apparatus and communicates with a circumferential portion of said cavity, and said vacuum tank is connected to said cavity via an exhaustion channel.

18 3. The molding die apparatus according to claim 2, wherein said vacuum apparatus includes a valve mechanism for controlling open and close of passage between said vacuum tank and said exhaustion channel.

4. The molding die apparatus according to claim 1, wherein said vacuum tank has volume capacity at least larger than a total volume capacity of said cavity plus said exhaustion channel.

24 5. A method of obtaining a molded product by injecting a molten resin into a cavity formed between a set of dies when said set of dies are closed, the method comprising:

keeping pressure within a vacuum tank provided in proximity to said cavity, wherein said pressure is lower than ambient atmospheric pressure;

30 forming an exhaustion channel for connecting said cavity with said vacuum tank by closing said set of dies; and

exhausting said cavity by aspirating air within said cavity when

opening said exhaustion channel to said vacuum tank.

6. The method for obtaining a molded product according to claim 5, wherein said exhaustion channel communicates with said vacuum tank by means of a valve mechanism.

6